

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Il-ju NA, et al.

Group Art Unit: 2615

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Confirmation No.: 3896

Appln. No.: 08/939,442

Examiner: C. Onuaku

Technology Center 2600

Filed: September 29, 1997

For:

MULTIMEDIA SYSTEM FOR TRANSFERRING AND RECEIVING PROGRAM

NUMBER AND METHODS THEREFOR

REQUEST FOR RECONSIDERATION UNDER 37 C.F.R. § 1.111

Commissioner for Patents Washington, D.C. 20231

Sir:

In response to the Office Action dated February 28, 2002, reconsideration and allowance of the subject application are respectfully requested. Upon entry of this Request, claims 1-68 are pending in the application. Applicant respectfully submits that the pending claims define patentable subject matter.

As a preliminary matter, Applicant thanks the Examiner for indicating that claims 13-16, 46, 47, 51 and 52 would be allowable if rewritten in independent form. However, Applicant respectfully requests the Examiner to hold in abeyance the rewriting of these claims until the Examiner has had the opportunity to reconsider the rejected parent claims in light of the arguments presented below in support of the Applicant's traverse of the rejection.

Claims 1-8, 10-12, 22, 23, 25-27, 30-41, 43-45, 48-50 and 58-68 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Yanagihara et al. (USP 5,899,578; hereafter

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"Yanagihara") in view of Haroun et al. (USP 5,787,259; hereafter "Haroun"). Claims 9 and 42 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Yanagihara in view of Haroun and Couts et al. (USP 5,742,730; hereafter "Couts"). Claims 17, 20, 21, 24, 28, 29, 53, 56 and 57 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Yanagihara in view of Haroun and Usui et al. (USP 6,305,018; hereafter "Usui"). Claims 18, 19, 54 and 55 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Yanagihara in view of Haroun, Usui and Fujii et al. (USP 5,966,385; hereafter "Fujii"). Applicant respectfully traverses the § 103 rejections of record.

In the Amendment filed December 13, 2001, Applicant argued that the present invention as recited in the independent claims is not anticipated by or rendered obvious in view of the combination of Yanagihara and Staats et al. because the combined references do not teach or suggest generating a control command for transferring the program information, wherein the control command is not included in the PSI of the transport stream, as recited in the independent claims. In response, the Examiner now cites Haroun in combination with Yanagihara in rejecting the independent claims.

The Examiner asserts that Yanagihara discloses all of the features of the independent claims except for a "control command [which] is not included in the program specific information (PSI) of the transport stream, which the Examiner contends is disclosed by Haroun. Further, the Examiner asserts that "[i]t would have been obvious to modify Yanagihara by realizing Yanagihara with the means to transfer a control command to control an electronic device wherein the control command is not included in the program specific information (PSI) of

a transport stream, as taught by Haroun, since [this] provides the desirable [advantage] of directly controlling the electronic device which simplifies the control process".

Applicant respectfully submits that the claimed invention would not have been rendered obvious in view of the combination of Yanagihara and Haroun (as well as the other applied references) because the combined references do not teach or suggest generating a control command for transferring the program information, wherein the control command is not included in the PSI of the transport stream, as claimed.

As discussed in the previous Amendments, Yanagihara discloses modifying the PSI of the transport stream, rather than generating a new control command. That is, Yanagihara teaches that the PSI is modified by altering the PAT to include only the PID specified by the PMT having a selected program number. The audio data, video data and PSI are inserted into isochronous packets according to the IEEE-1394 standard and transmitted to the DVCR where the audio data, video data and PSI are all recorded (see column 6, line 45 - column 7, line 4). On the other hand, the present invention is directed to adding a new command to the AV/C CTS for transferring a program number to recording/reproducing using the asynchronous transfer mode of the IEEE-1394 standard, wherein the control command is not included in the PSI of the transport stream.

Haroun is directed to a digitally interconnected entertainment system wherein a computer is interconnected with consumer electronics devices via a bus interface. As shown in Figure 1, the entertainment system 10 includes an entertainment computer (EC) 15 connected to various consumer electronics devices by an IEEE 1394 bus 20. The consumer electronics devices

include a video cassette recorder (VCR) 25, a digital versatile disk (DVD) player 30, a compact disk (CD) player 35 and a receiver 40. The bus 20 transmits control commands and data, such as audio and video data, between the EC 15 and the consumer electronics devices. The EC 15 is also connected to a television 50 by the bus 20 and by a separate video path 55. The EC 15 controls the television 50 by transmitting commands on the bus 20 and provides video data to the television 50 using the video path 55.

Nowhere does Haroun teach or suggest generating and transferring a control command based on program information of intended programs, wherein the control command is not included in the PSI of the transport stream, as claimed. Moreover, the Examiner reliance on Haroun for disclosing that a "control command input by the user through an input device to control an electronic device is not included in program specific information of the transport stream" is unclear since this feature is known and defined in the IEEE serial bus standard. As discussed in the "Background of the Invention" section of the present application, according to the IEEE 1394 serial bus standard, audio/video data is transferred in real time using the isochronous transfer mode while transactions required for communication and control commands such as the audio/video control command and transaction set (AV/C CTS) are transferred using the asynchronous transfer mode. For example, as shown in Figure 1 and discussed on page 3, commands from a remote controller 11 for the ATV 10, such as fast-forward and rewind, can be transferred to the HD-VCR 20 via the IEEE 1394 serial bus. However, control commands of the AV/C CTS transmitted to the to the HD-VCR 20 do not include commands for transferring information related to the MPEG2 system layer such a program number information.

Further, Applicant respectfully submits that that one of ordinary skill in the art would not have been motivated to modify the Yanagihara device based on the teachings Haroun to produce the claimed invention since Yanagihara is directed to transferring selected program information modifying the PSI by altering the PAT to include only the PID specified by the PMT having a selected program number. Thus, modifying the Yanagihara device to generate and transfer a control command based on the program number information would eliminate the fundamental operational principles of the Yanagihara device. However, as set for in MPEP 2143.01, it is well settled that if the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are to sufficient to render the claims *prima facie* obvious. *In re Ratti*, 270 F.2d 810, 123 USPO 349 (CCPA 1959).

To establish a *prima facie* case of obviousness under 35 U.S.C. § 103, there must be some suggestion or motivation to modify to combine the reference teachings. "To support the conclusion that the claimed invention is directed to obvious subject matter, either references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the reference." *Ex parte Clapp* 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985). However, in the present case the Examiner has failed to provide any objective reasoning why one of ordinary skill in the art would have been motivated to modify Yanagihara other than simply stating that "[p]roviding a control command which is not included in the PSI of a transport stream provides the desirable advantage of directly

controlling the electronic device which simplifies the control process". However, providing a control command which is included in the PSI allows for the direct control of the electronic. Further, the Examiner does not point out any portion of Yanagihara which suggests the desirability of modifying the reference's teachings. Moreover, as discussed above, the Examiner's proposed modification of Yanagihara would impermissible change the principle of operation of the Yanagihara system.

Similarly, it is quite clear that Couts, Usui and Fujii, alone or in combination with Yanagihara, do not teach or suggest this feature of the present invention. In particular, none of the references disclose a system which allows a user to input a program number of an intended program which is transferred from a receiver to a recording/reproducing device via a control command.

Accordingly, Applicant respectfully submits that independent claims 1, 3, 22, 26, 30, 31, 34, 35, 48, 58, 62, 67 and 68, as well as the dependent claims, should be allowable because applied references, alone or combined, do not teach or suggest all of the features of the claims.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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Applicant hereby petitions for any extension of time which may be required to maintain the pendency of this case, and any required fee, except for the Issue Fee, for such extension is to be charged to Deposit Account No. 19-4880.

Respectfully submitted,

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Date: May 28, 2002

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